

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

FIG. 1

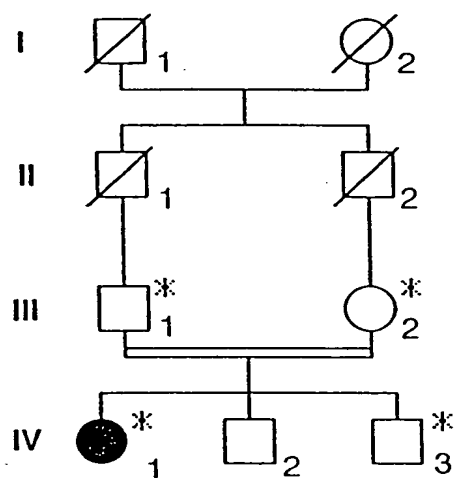


FIG. 2

D6S305

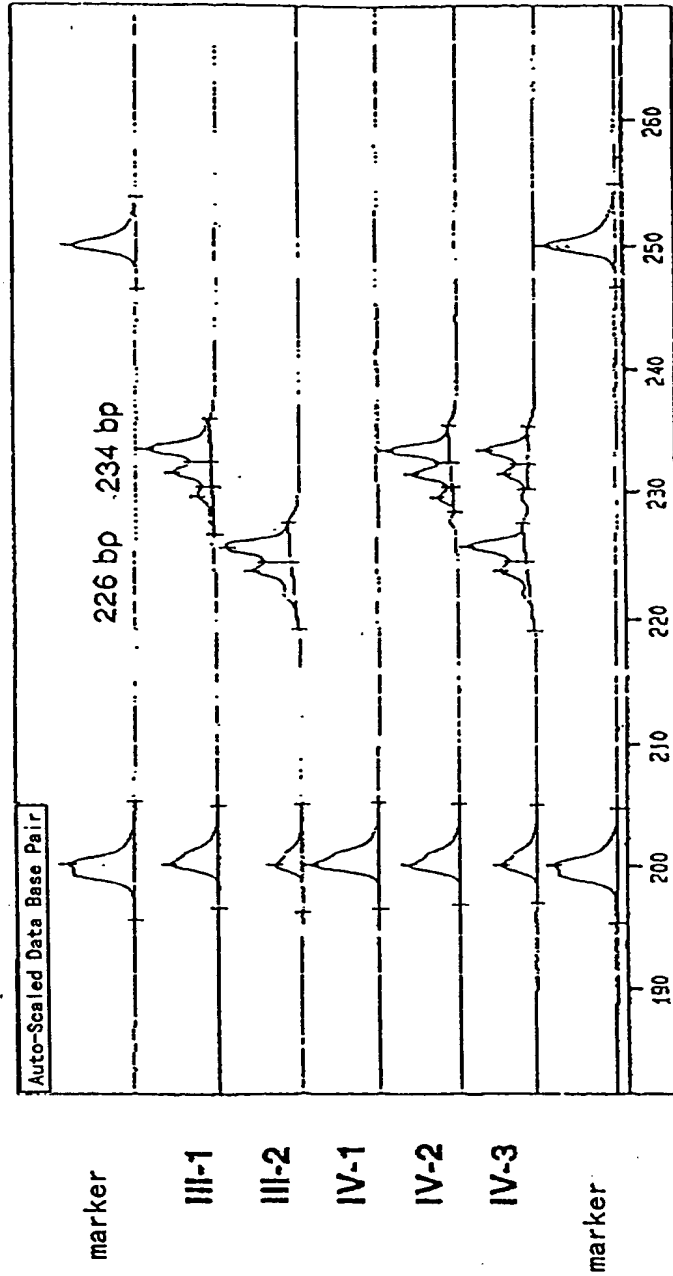


FIG. 3

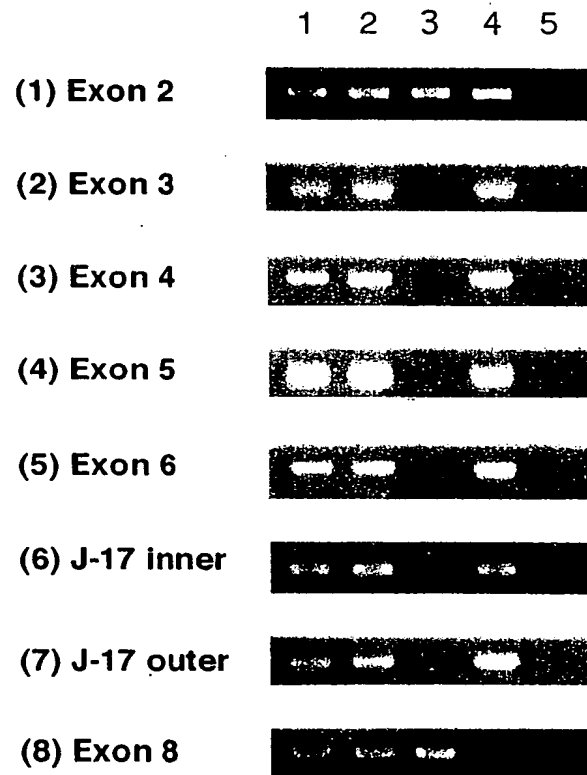
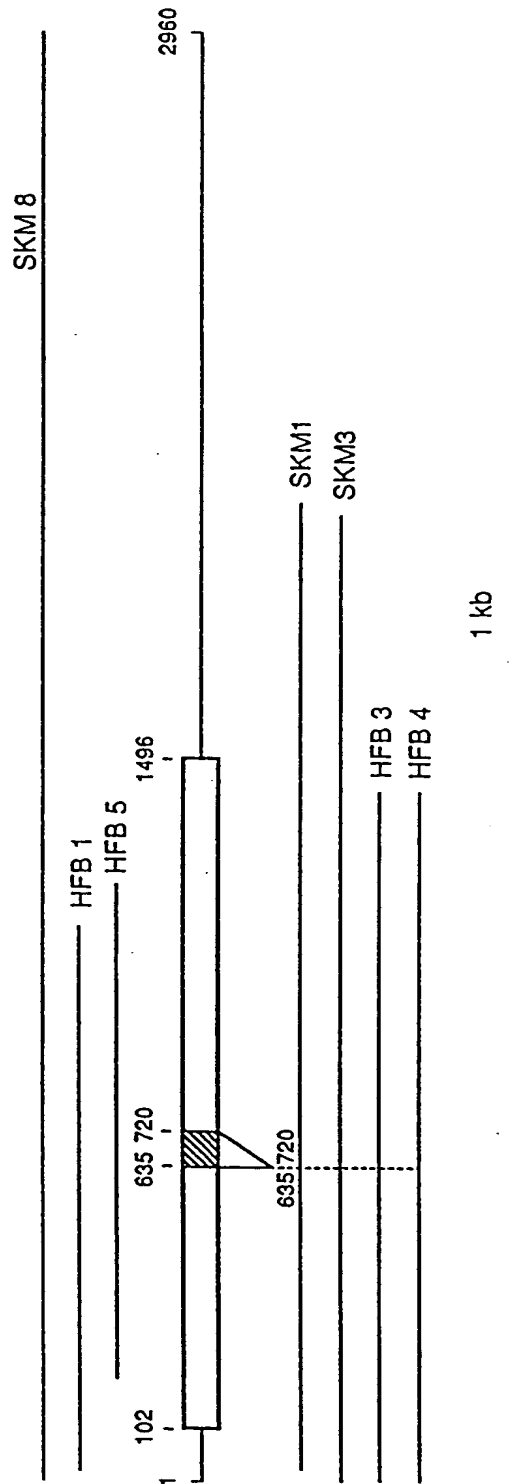


FIG. 4



515

Parkin	Met	Ile	Val	Phe	Val	Arg	Phe	Asn	Ser	Ser	His	Gly	Phe	Pro	Val	Glu	Val	Asp	Ser	Asp
UBIQUITIN HUMAN	Met	Gln	Ile	Phe	Val	Lys	Thr	Leu	Thr	Gyl	Lys	Thr	Ile	Thr	Leu	Glu	Val	Glu	Pro	Ser
UBIQUITIN YEAST	Met	Gln	Ile	Phe	Val	Lys	Thr	Leu	Thr	Gyl	Lys	Thr	Ile	Thr	Leu	Glu	Val	Glu	Ser	Ser
UBIQUITIN SOYBEAN	Met	Gln	Ile	Phe	Val	Lys	Thr	Leu	Thr	Gyl	Lys	Thr	Ile	Thr	Leu	Glu	Val	Glu	Ser	Ser
					5					10					15					20
Parkin	Thr	Ser	Ile	Phe	Gln	Leu	Lys	Glu	Val	Val	Ala	Lys	Arg	Gln	Gly	Val	Pro	Ala	Asp	Gln
UBIQUITIN HUMAN	Asp	Thr	Ile	Glu	Asn	Val	Lys	Ala	Lys	Ile	Gln	Asp	Lys	Glu	Gly	Ile	Pro	Pro	Asp	Gln
UBIQUITIN YEAST	Asp	Thr	Ile	Asp	Asn	Val	Lys	Ser	Lys	Ile	Gln	Asp	Lys	Glu	Gly	Ile	Pro	Pro	Asp	Gln
UBIQUITIN SOYBEAN	Asp	Thr	Ile	Asp	Asn	Val	Lys	Ala	Lys	Ile	Gln	Asp	Lys	Glu	Gly	Ile	Pro	Pro	Asp	Gln
					25					30					35					40
Parkin	Leu	Arg	Val	Ile	Phe	Ala	Gly	Lys	Glu	Leu	Arg	Asn	Asp	Trp	Thr	Val	Gln	Asn	Cys	Asp
UBIQUITIN HUMAN	Gln	Arg	Leu	Ile	Phe	Ala	Gly	Lys	Gln	Leu	Glu	Asp	Gly	Arg	Thr	Leu	Ser	Asp	Tyr	Asn
UBIQUITIN YEAST	Gln	Arg	Leu	Ile	Phe	Ala	Gly	Lys	Gln	Leu	Glu	Asp	Gly	Arg	Thr	Leu	Ser	Asp	Tyr	Asn
UBIQUITIN SOYBEAN	Gln	Arg	Leu	Ile	Phe	Ala	Gly	Lys	Gln	Leu	Glu	Asp	Gly	Arg	Thr	Leu	Ala	Asp	Tyr	Asn
					45					50					55					60
Parkin	Leu	Asp	Gln	Gln	Ser	Ile	Val	His	Ile	Val	Gln	Arg	Pro	Trp	Arg	Lys				
UBIQUITIN HUMAN	Ile	Gln	Lys	Glu	Ser	Thr	Leu	His	Leu	Val	Leu	Arg	Leu	Arg	Gly	Gly				
UBIQUITIN YEAST	Ile	Gln	Lys	Glu	Ser	Thr	Leu	His	Leu	Val	Leu	Arg	Leu	Arg	Gly	Gly				
UBIQUITIN SOYBEAN	Ile	Gln	Lys	Glu	Ser	Thr	Leu	His	Leu	Val	Leu	Arg	Leu	Arg	Gly	Gly				
					65					70						75				

FIG. 6

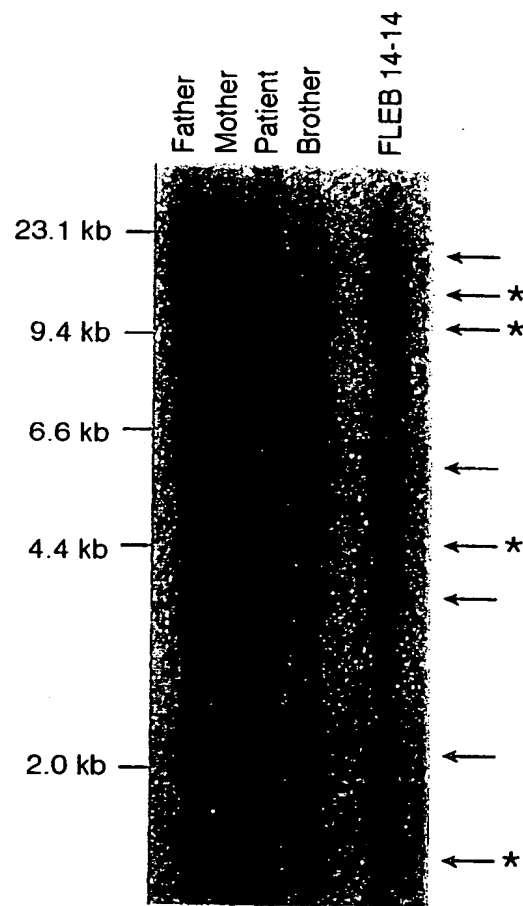


FIG. 7

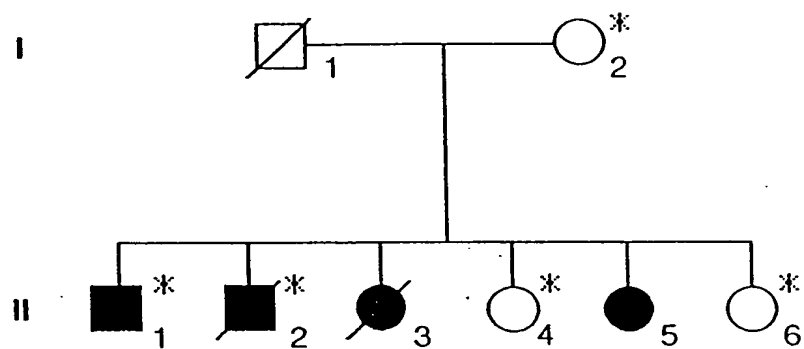


FIG. 8

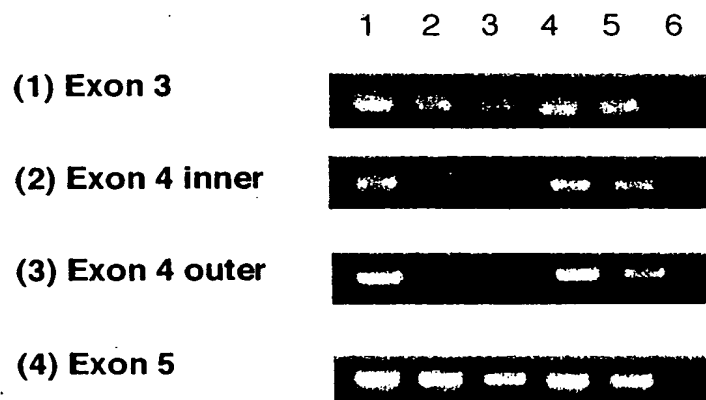


FIG. 9

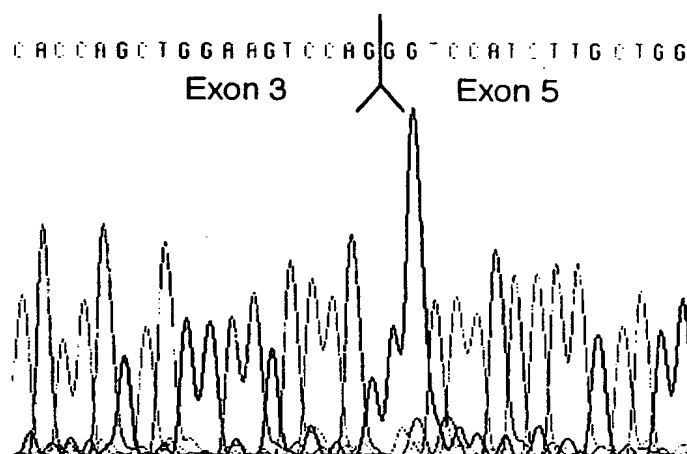


FIG. 10A

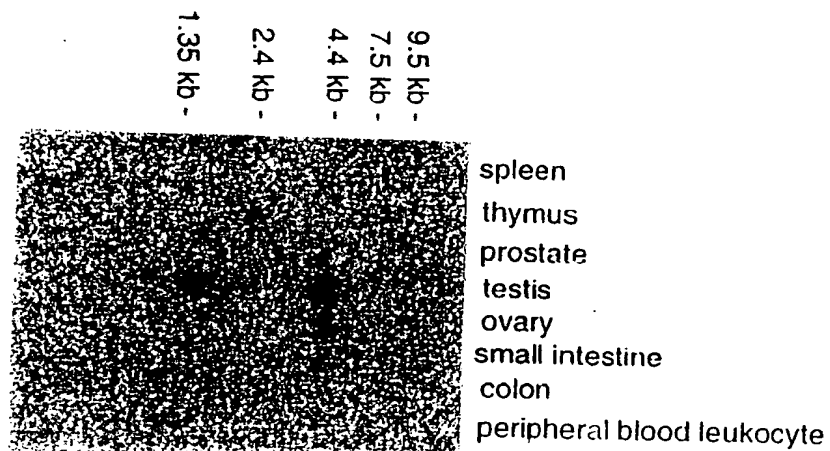


FIG. 10B

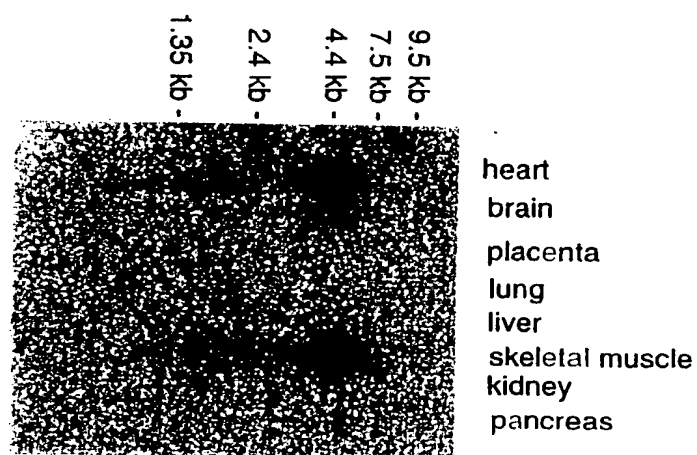


FIG. 10C

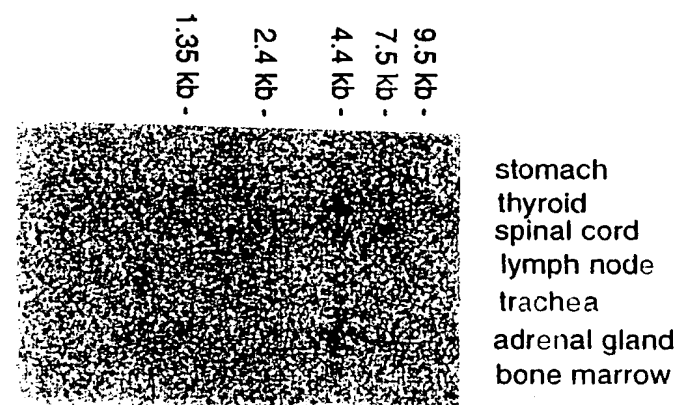


FIG. 11A

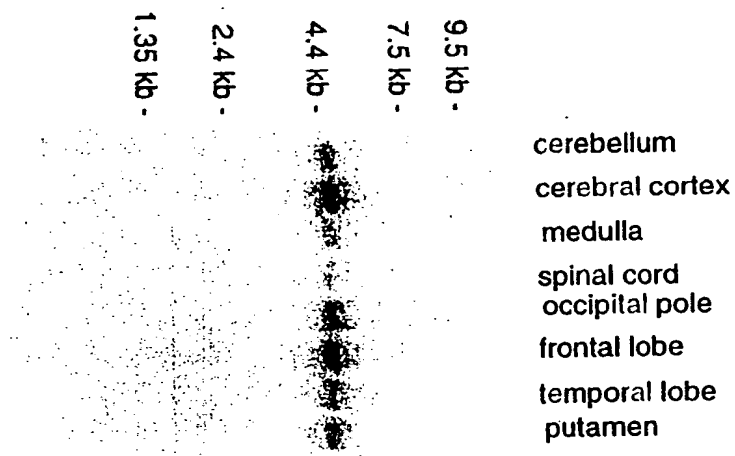


FIG. 11B

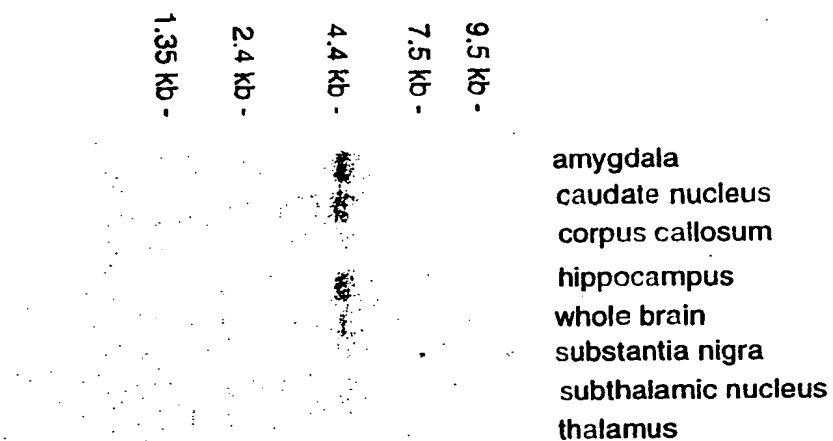


FIG. 12

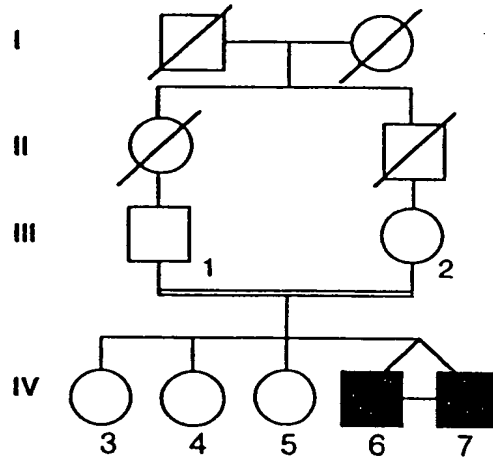


FIG. 13

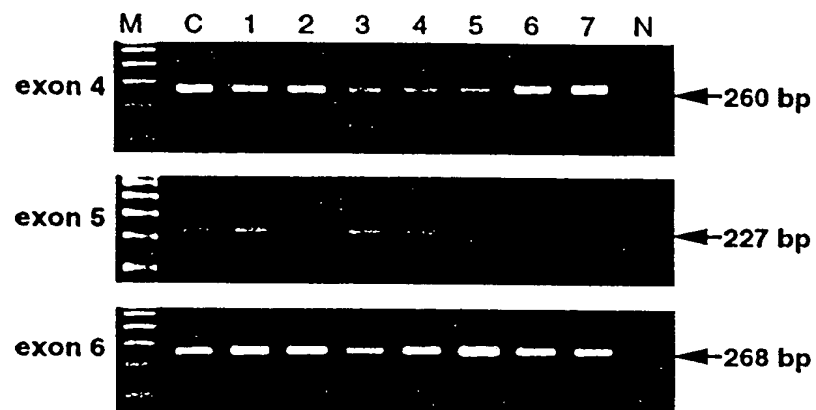


FIG. 14

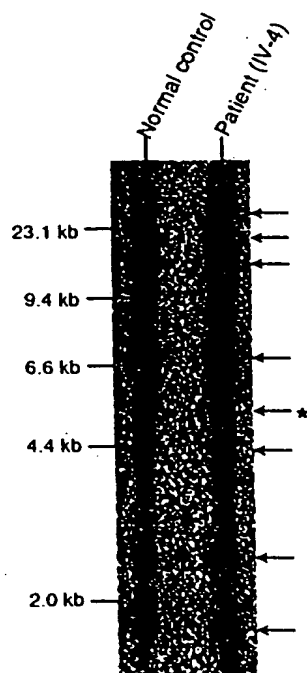


FIG. 15

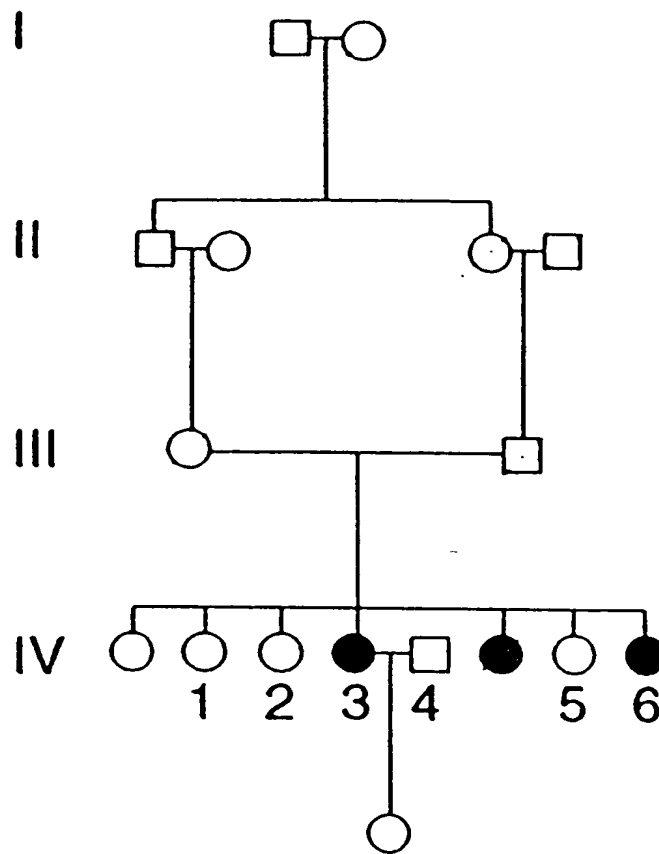


FIG. 16

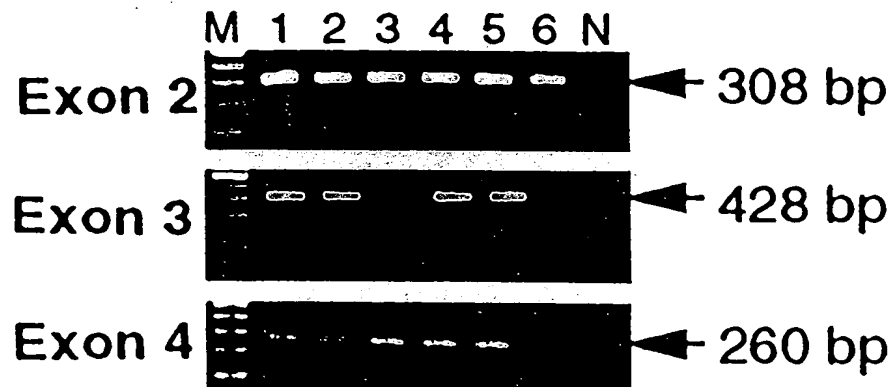


FIG. 17

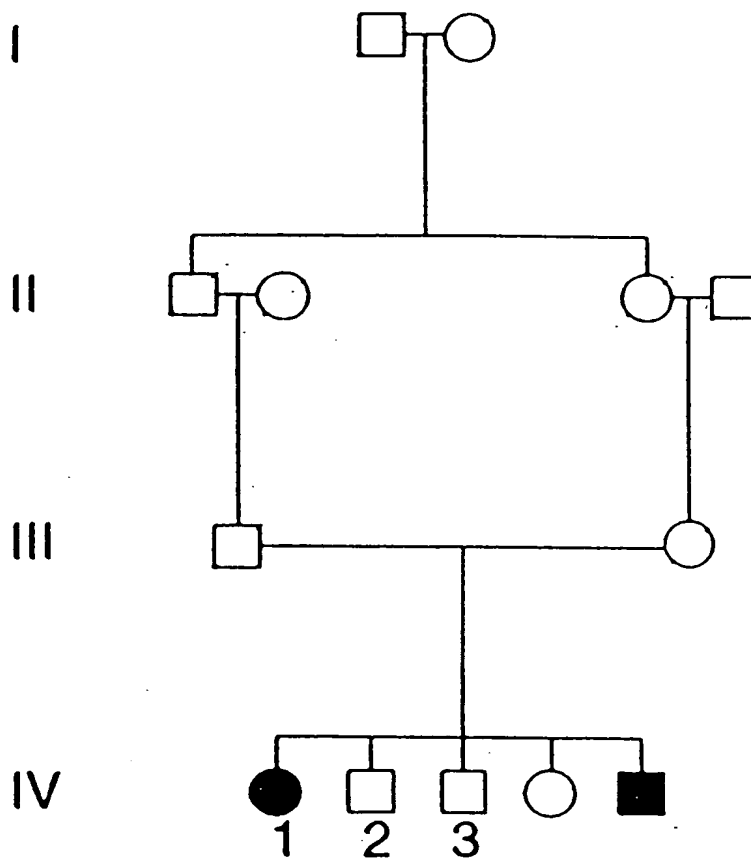


FIG. 18

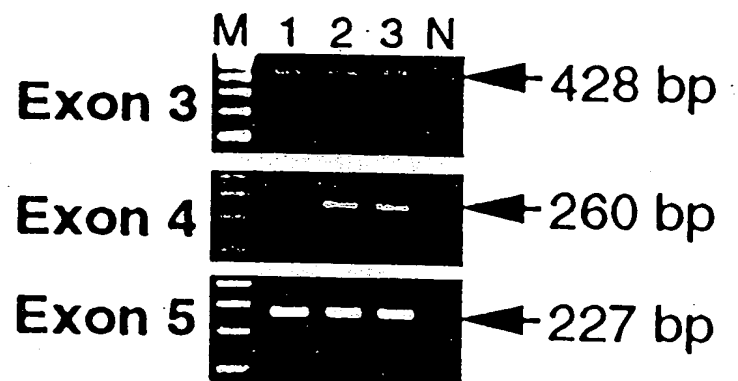


FIG. 19

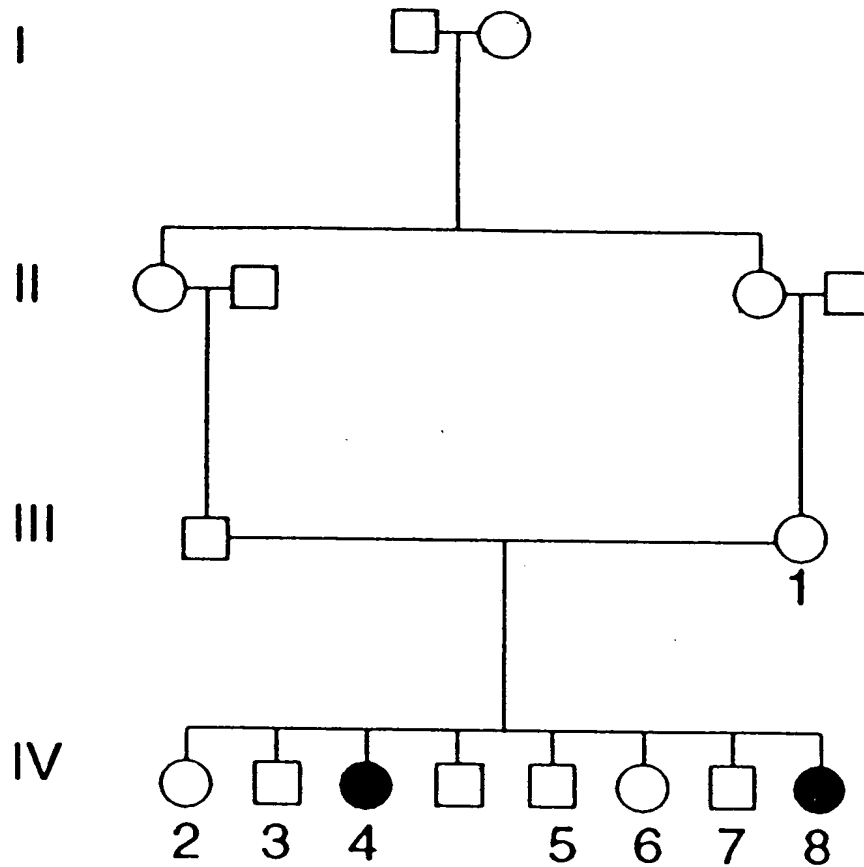


FIG. 20

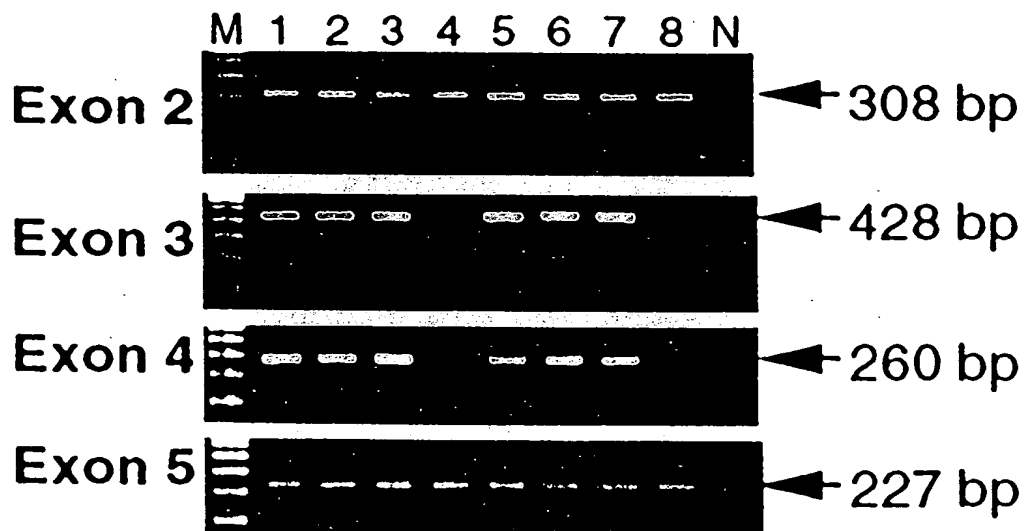


FIG. 21

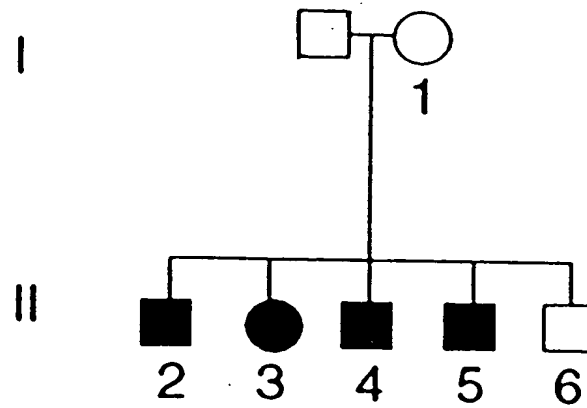


FIG. 22

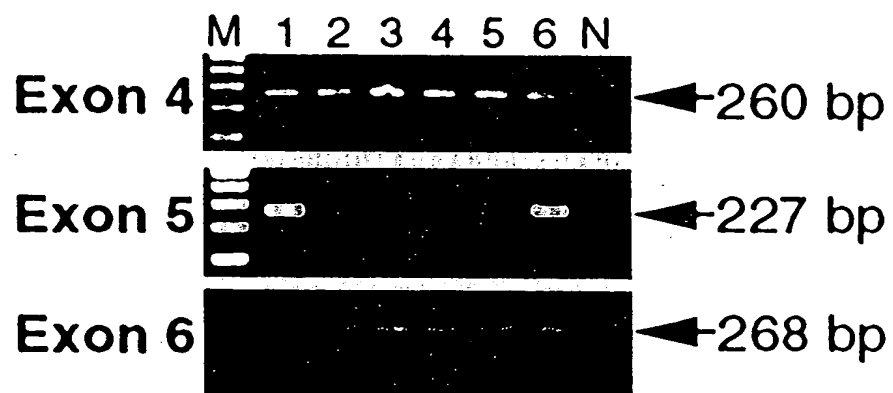


FIG. 23

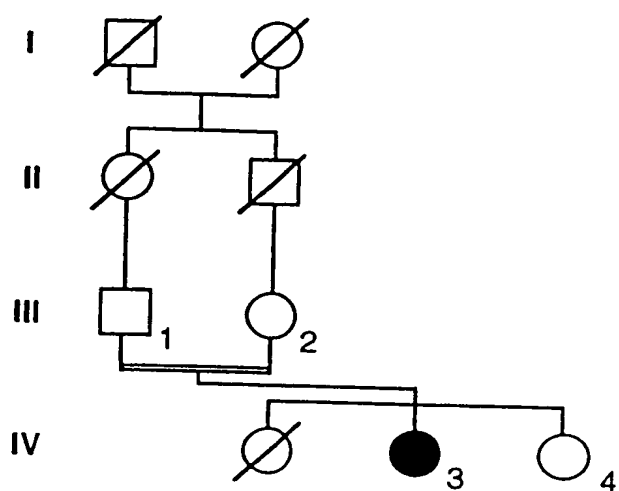


FIG. 24

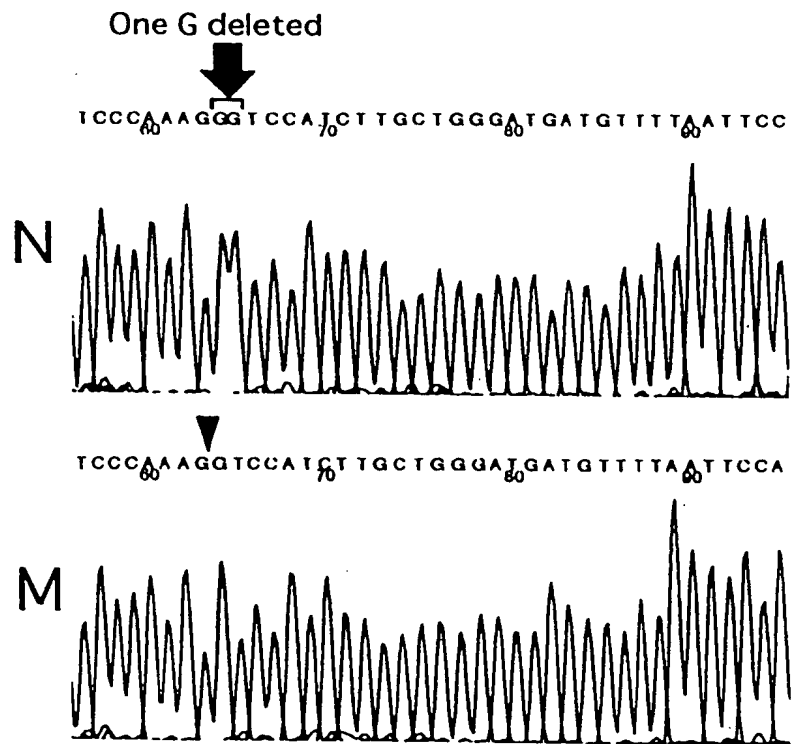



FIG. 25

intron 4  Exon 5

		640			650			660		
Normal	tcccaaag	GGT CCA TCT TGC TGG GAT GAT GTT TTA ATT								
		Gly Pro Ser Cys Trp Asp Asp Val Leu Ile								
Mutant	tcccaaag	GTC CAT CTT GCT GGG ATG ATG TTT TAA TT								
		Val His Leu Ala Gly Met Met Phe ***								

FIG. 26

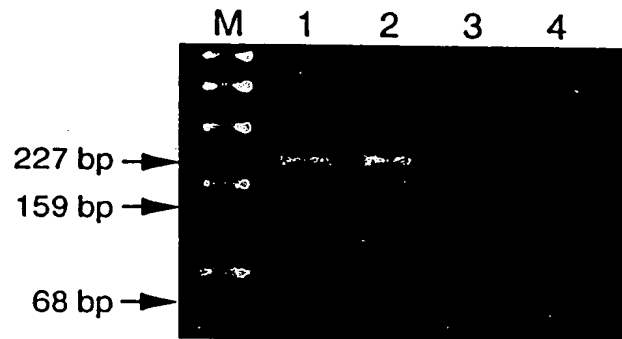


FIG. 27

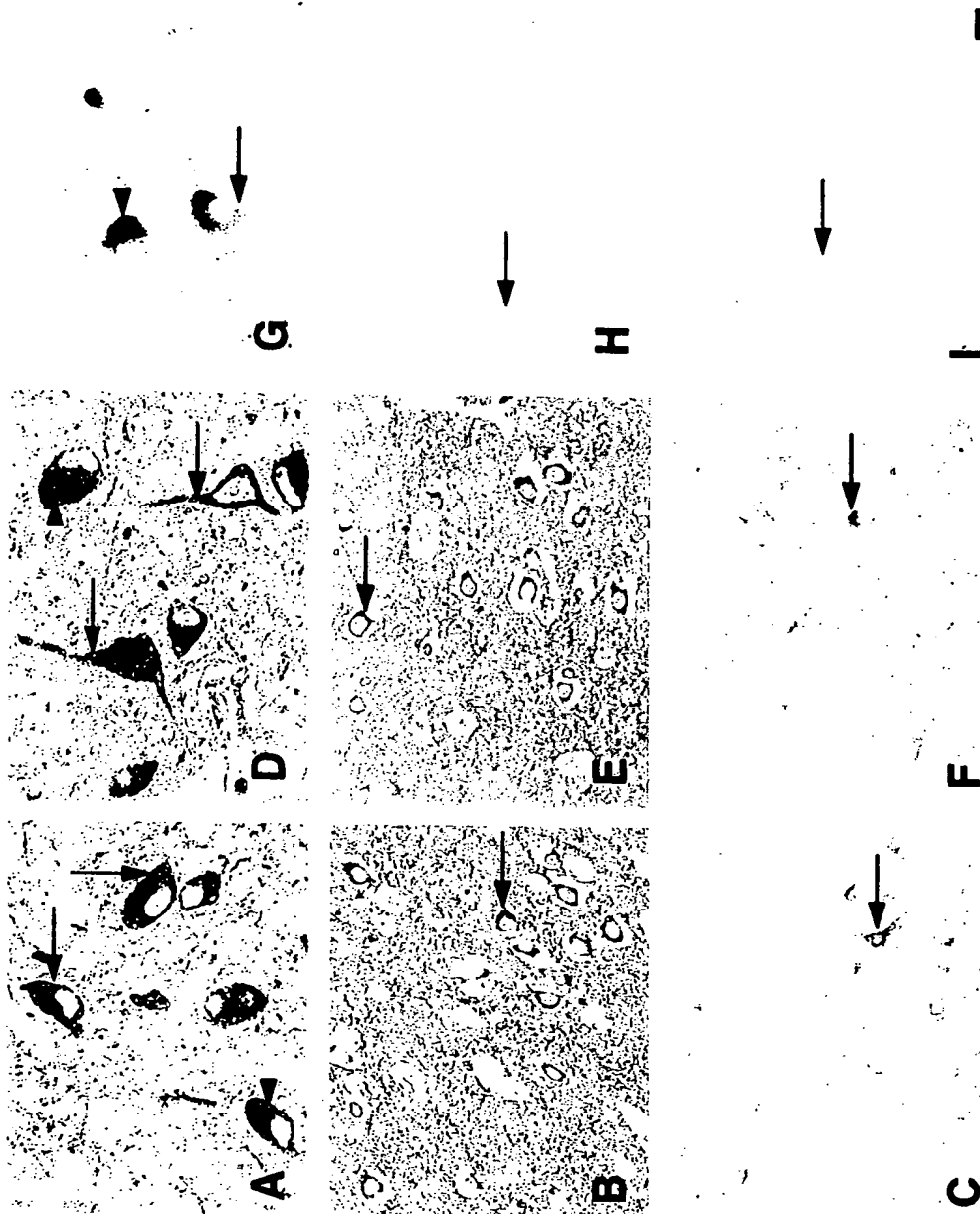


FIG. 28

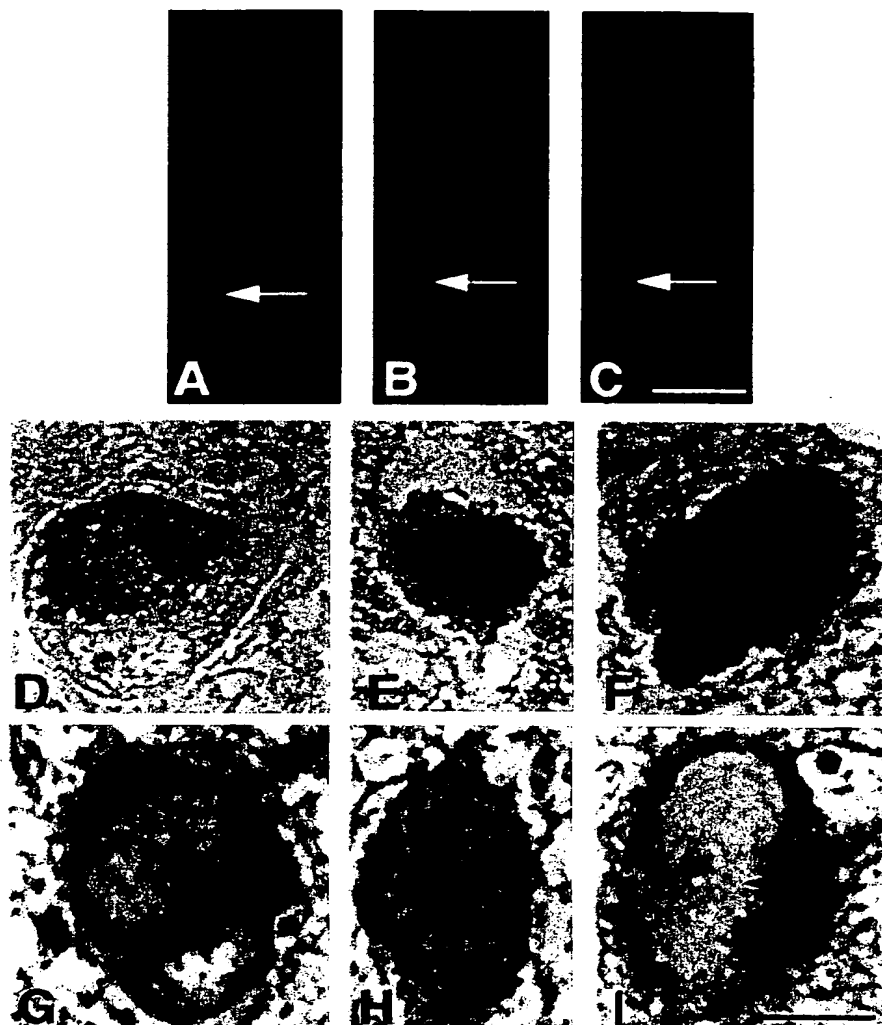


FIG. 29

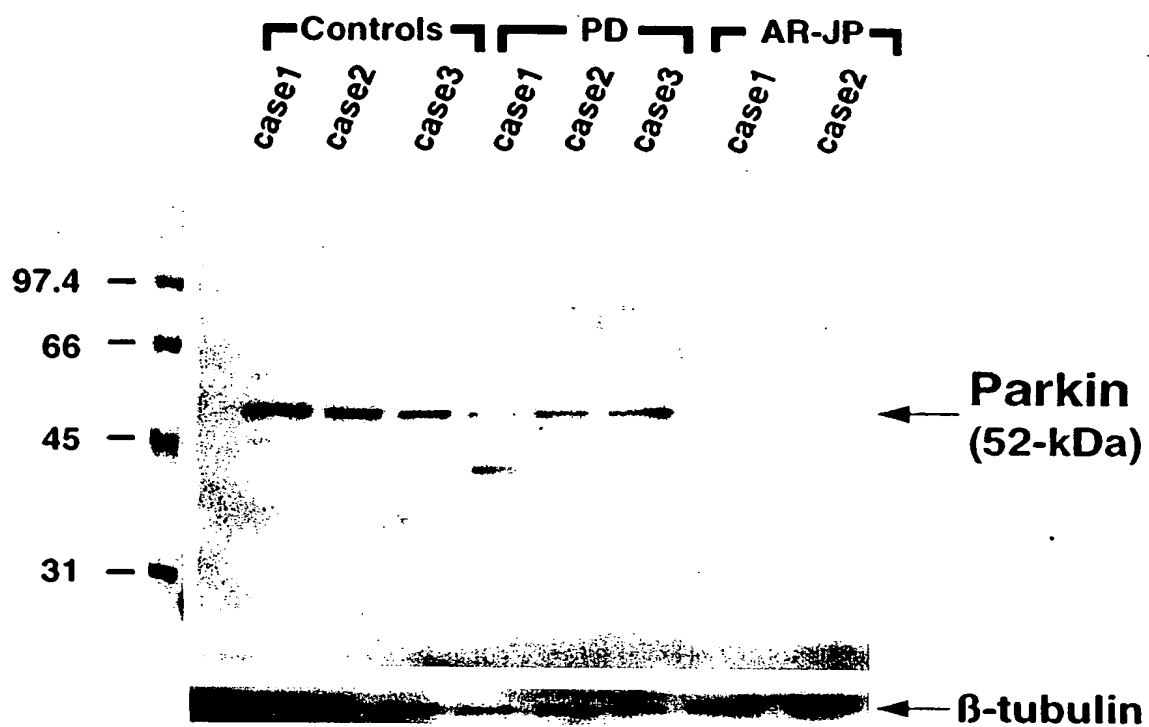


FIG. 30

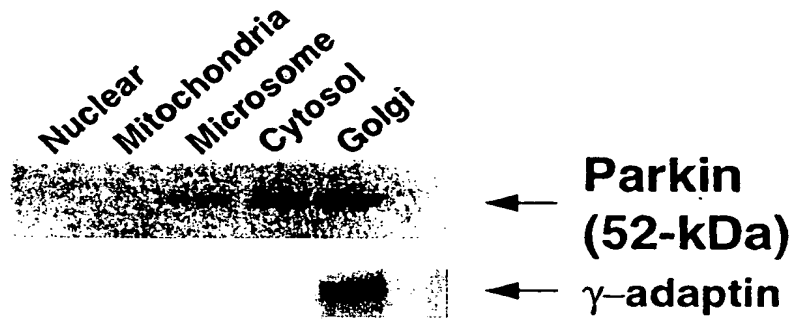
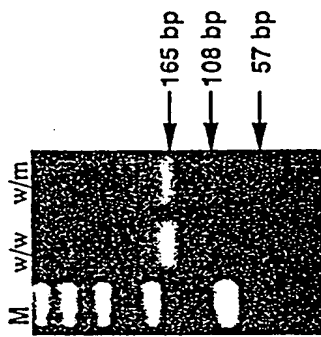


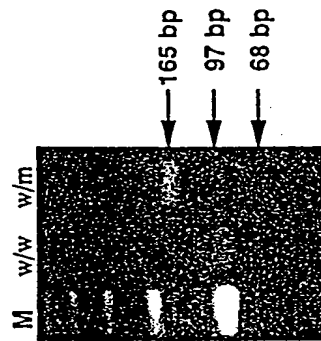
FIG. 31



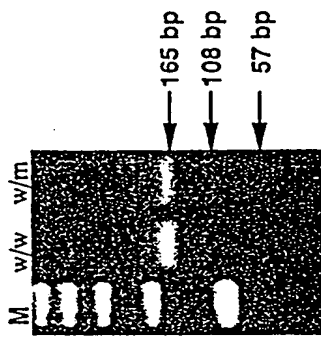
FIG. 32



A) *A/wNI*



B) *NciI*



C) *Bsp1286I*

FIG. 33

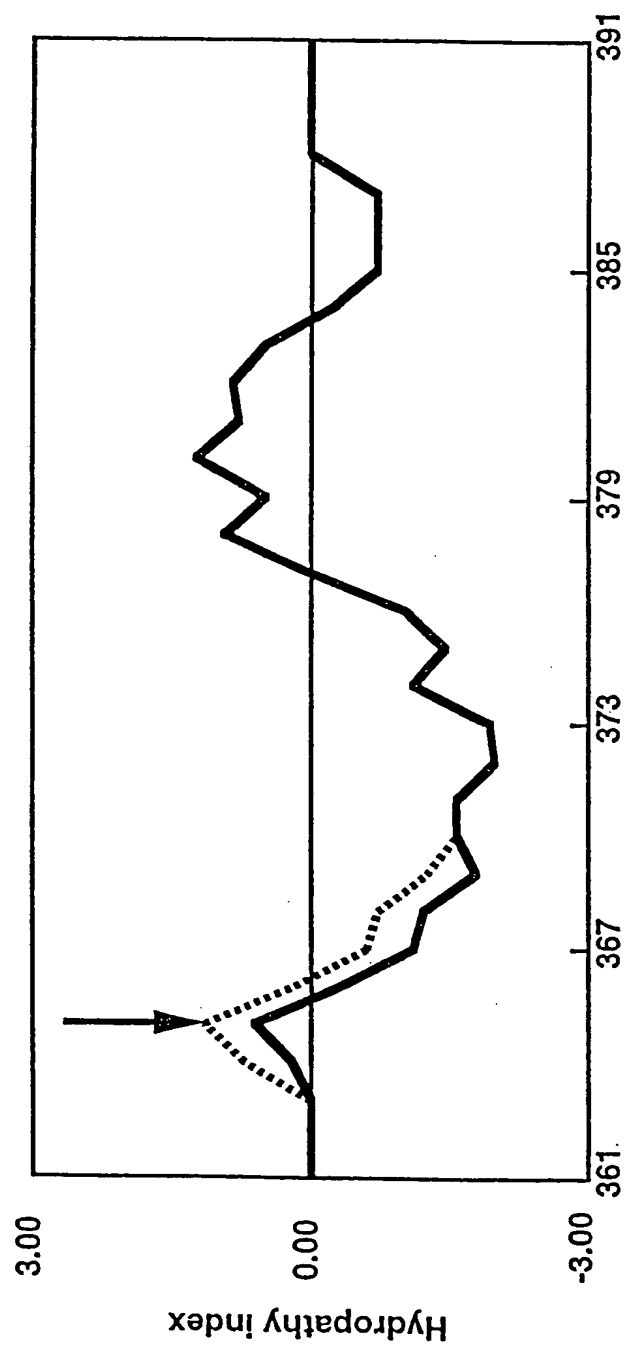


FIG. 34

